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THOMPSON HALL

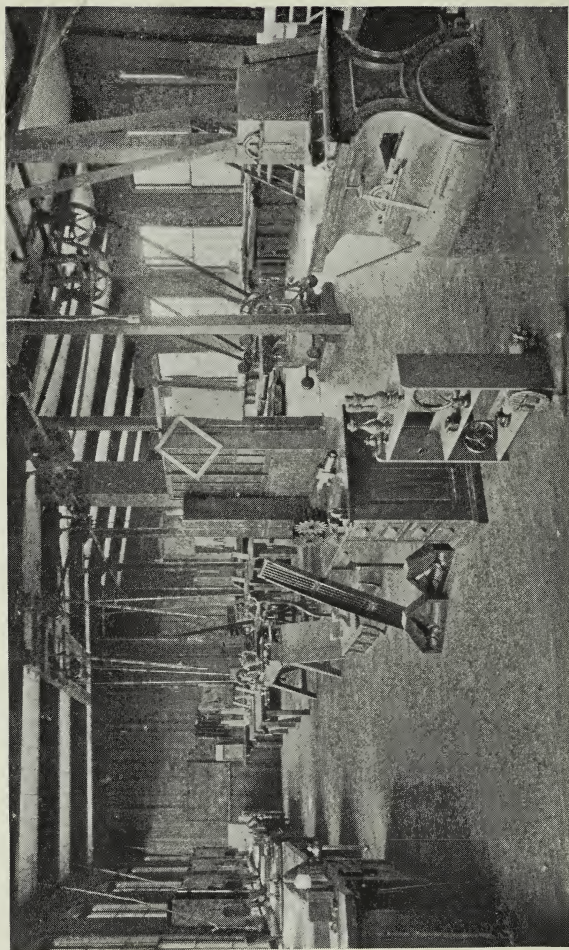
# The Four-Year Courses of Study

Given by the

## New Hampshire College of Agriculture and the Mechanic Arts

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Durham



THE WOOD SHOP.

# I. Course in Agriculture.

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## STUDIES.

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Agriculture  
Algebra  
Bacteria  
Birds  
Botany  
Butter-making  
Chemistry  
Constitutional Law  
Dairying  
Domestic Animals  
Drawing  
Diseases of Crops  
English Language  
English Literature  
Ethics  
Fertilizers  
Floriculture  
Forage Crops  
Forestry  
French  
Fruits  
Geology  
German  
Insects  
Laws of Business  
Logic  
Meteorology  
Minerals  
Military Tactics  
Physics  
Political Economy  
Roads  
Soils  
Stock-feeding  
Surveying  
Wood Working  
Vegetables  
Zoölogy

This course is designed to give a training in agriculture that is thoroughly practical as well as scientific, with as much general educational study as is possible.

During the last few years the course has been strengthened by the addition of new studies, by great improvement in facilities for practical instruction, and by increasing the number of instructors. Students in this course study with sixteen members of the faculty or other instructors.

Graduates from this course have become successful farmers, managers of farms and of creameries, and experiment station investigators.



## II. Course in Mechanical Engineering.

### STUDIES.

Algebra  
Analytic Geometry  
Applications of Electricity  
Carpentry  
Chemical Laboratory  
Chemistry  
Descriptive Geometry  
Differential Calculus  
Dynamometers  
Electricity  
Electro-motors  
English Language  
English Literature  
Free-hand Drawing  
French  
Gas Engine  
Geometry  
German  
Heat  
Heat Motors  
Integral Calculus  
Joinery  
Light  
Machine Design  
Materials of Construction  
Mechanical Drawing  
Mechanical Laboratory  
Mechanics  
Mechanics of Engineering  
Mechanism  
Metal Work  
Military Tactics  
Mineralogy  
Moulding  
Pattern Making  
Perspective Drawing  
Physical Laboratory  
Physics  
Political Economy  
Sound  
Steam Engine  
Surveying  
Thermodynamics  
Trigonometry

The special object of the course is to educate young men in the scientific branches relating to the design, construction, care, and operation of machinery.

The subjects studied may be broadly divided into (1) the mathematical, forming the foundation of the course; (2) the technical, pertaining directly to the professional work of the engineer; and (3) the general, having less direct bearing upon the professional work, but affording the student greater breadth of education, and fitting him for the larger duties of citizenship.

The study of the scientific principles underlying the work of the engineer is accompanied throughout the course by actual practice in mechanical operations and in scientific research. In the workshops the student learns the use of tools for working in wood and in metals. In the mechanical laboratory he makes tests of the properties of materials, of the power of steam engines, pumps, dynamometers, and other machines. In the chemical and the physical laboratories he learns by experiment the effects of the operation of the forces of nature.

Recent graduates of the course are occupied as civil, mechanical, and electrical engineers, draftsmen, and machine-shop foremen.

### III. Course in Electrical Engineering.

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#### STUDIES.

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Algebra  
Analytic Geometry  
Applications of Electricity  
Chemistry  
Descriptive Geometry  
Dynamics  
Electricity  
Electro-motors  
English Language  
English Literature  
Free-hand Drawing  
French  
Geometry  
German  
Heat  
Heat Motors  
Integral Calculus  
Light  
Materials of Construction  
Mechanical Drawing  
Mechanics  
Mechanics of Engineering  
Mechanism  
Metal Work  
Military Tactics  
Mineralogy  
Perspective Drawing  
Physics  
Political Economy  
Sound  
Surveying  
Theoretical Electricity  
Thermodynamics  
Trigonometry  
Wood Work

The aim of the course is to meet the needs of young men who intend to enter the practice of electricity in its various applications.

The basis of the course is physics, especially its electrical side, mathematics, and mechanical engineering.

The general education of the student is, however, kept in mind, and the subject matter of the junior and senior years is intended not only to strengthen this part of the development, by teaching him to think and act for himself, but also to awaken a lively and intelligent interest in the work before him.





## IV. Course in Technical Chemistry.

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### STUDIES.

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Algebra  
Assaying  
Blowpipe Analysis  
Calculus  
Chemical Philosophy  
Dynamometers  
Electro-Motors  
Electric Measurements  
English Language  
English Literature  
Free-hand Drawing  
French  
Geology  
Geometry  
German  
German Chemical Journals  
Heat  
Industrial Chemistry  
Inorganic Chemistry  
Light  
Mechanical Drawing  
Mechanics of Engineering  
Mechanism  
Metal Work  
Military Tactics  
Mineralogy  
Organic Chemistry Lectures  
Physical Chemistry  
Physical Laboratory  
Physics  
Physiological Chemistry  
Political Economy  
Qualitative Analysis  
Quantitative Analysis  
Sanitary Chemistry  
Thermodynamics  
Trigonometry  
Wood Work

The course in Technical Chemistry is designed to give thorough training in the science of chemistry and its allied subjects, and to meet the requirements of the chemical engineer.

Excellent laboratory facilities are provided, furnished with the most modern apparatus. The laboratories are also supplied through pipes with water, gas, suction, high and low pressure steam, and are wired to use any electric current required.

Positions in colleges, experiment stations, sugar houses, fertilizer works, and manufacturing establishments have been filled by graduates from the chemical courses, while others have used these courses as a preparation for the medical profession or for study abroad.



## V. The General Course.

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### STUDIES.

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Agriculture (elective)  
Algebra  
American Literature  
Analytic Geometry  
(elective)  
Astronomy  
Botany  
Calculus (elective)  
Chemistry  
Constitutional Law  
Drawing  
English Literature  
Ethics  
French  
Geology  
Geometry  
German  
History  
History of Philosophy  
International Law  
Laws of Business  
Logic  
Meteorology  
Mineralogy  
Military Tactics  
Physics  
Political Economy  
Psychology  
Roads (elective)  
Surveying  
Wood Working  
Zoölogy

This course gives to students an opportunity to take parts of the courses in Agriculture and the Mechanic Arts; to pursue the study of English, French, German, and history each for two or more years; to devote to philosophy nearly two years, and to mathematics and the sciences the time usually allowed in colleges. With its arrangement of elective studies, it is fitted to serve at the same time as a course for women and as a preparation for teaching, professional study, or for business life.

Several of the recent graduates from this course have engaged in teaching. Others have taken graduate courses or entered business or editorial work.





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CONANT HALL (SCIENCE BUILDING).

SHOPS AND POWER STATION.

THOMPSON HALL.

NESMITH HALL (EXPERIMENT STATION).